

ABSTRACT

A method and apparatus for creating ablation-free visible markings on a multi-layer hard disk magnetic storage media by laser-induced deformation while maintaining the integrity of the protective carbon layer, and without destroying the multi-layered structure of the media. The apparatus includes a laser generator, a rotatable optical plate and a beamsplitter by which the fluence of the beam can be controlled without altering the power setting to the laser generator, a beam sampler for determining the fluence of the beam, and an optical plate which acts with the beamsplitter to eliminate unwanted reflection of the laser beam. The laser beam is steered by a beamsteerer to a hard disk held in a material handling unit. This technique is highly suitable for marking or labeling finished hard disks for the purposes of identification and traceability, without creating any short-term or long-term contamination problems. The corresponding storage media so marked are also claimed.